I Claim:

1. A delivery system for delivering cooling fluid to cool a hot component on a board, the component having a designated spray-location, comprising:

a spray-module including a sprayer configured for delivering cooling fluid to cool the component when the spray-module is located in the designated spray-location; and

an actuator configured to actuate through a plurality of actuator positions that relatively position the spray-module at a plurality of lateral locations with respect to the board, one of the plurality of lateral locations being the designated spray-location.

2. The delivery system of claim 1, wherein:

the actuator is structurally configured for one-degree-of-freedom actuation among the plurality of actuator positions, and

the plurality of actuator positions independently determines the lateral locations to which the spray-module can be actuated.

3. The delivery system of claim 2, being further configured for delivering cooling fluid to cool a second hot component on the board, the second component having a second designated spray-location, and further comprising:

a second spray-module including a second sprayer configured for delivering cooling fluid to cool the second component when the second spray-module is located in the second designated spray-location; and

a second actuator configured to actuate through a second plurality of actuator positions that relatively position the second spray-module at a second plurality of lateral locations with respect to the board, one of the second plurality of lateral locations being the second designated spray-location;

wherein the second actuator is configured for one-degree-of-freedom actuation among the second plurality of actuator positions; and

wherein the second plurality of actuator positions independently determines the lateral locations to which the second spray-module can be actuated.

4. The delivery system of claim 3, wherein the board is a unitary board.

5. The delivery system of claim 3, wherein the first and second actuators are configured such that the first plurality of lateral locations lies along a first line, the second plurality of lateral locations lies along a second line, and the first and second lines are parallel.

6. The delivery system of claim 3, and further including a spray-module hub, wherein the first and second actuators are configured such that the first plurality of lateral locations lies along a first line, the second plurality of lateral locations lies along a second line, and the first and second lines intersect at the hub.

7. The delivery system of claim 6, wherein:

each actuator is configured to relatively move its spray-module to a hub-location adjacent to the hub;

each spray-module includes a reservoir configured to hold cooling fluid for delivery; and

the spray-modules and hub are configured for the hub to provide cooling fluid to the reservoir of each spray-module when that spray-module is in the hub-location of its actuator.

8. The delivery system of claim 2, wherein the actuator is configured such that the plurality of lateral locations lies along a single, nonlinear pathway.

9. The delivery system of claim 8, wherein the actuator includes a continuous loop of ribbon mounted on a plurality of supports, the spray-module being carried on the ribbon.

10. The delivery system of claim 9, and further comprising a second spray-module, wherein the second spray-module is carried on the ribbon at a different station along the ribbon.

11. The delivery system of claim 9, and further including a configuration system including a support-actuator configured to adapt the plurality of supports for use with a different plurality of lateral locations by moving one or more of the plurality of supports.

12. The delivery system of claim 1, wherein the actuator is structurally configured for two-degree-of-freedom actuation among the plurality of actuator positions.

13. The delivery system of claim 12, wherein:

the actuator includes a first actuator-portion configured to relatively position the spray-module laterally with a first degree-of-freedom; and

the actuator includes a second actuator-portion configured to relatively position the spray-module laterally with a second degree-of-freedom.

14. The delivery system of claim 1, and further including a spray-module station, wherein:

the actuator is configured to relatively move the spray-module to a station-location adjacent to the spray-module station;

the spray-module includes a reservoir configured to hold cooling fluid for delivery; and

the spray-module and spray-module station are configured for the spray-module station to provide cooling fluid to the reservoir of the spray-module when the spray-module is in the station-location.

15. The delivery system of claim 1, and further including a spray-module station including a magazine configured to store one or more replacement spray-modules, wherein:

the actuator is configured to removably connect to a spray-module of the one or more replacement spray-modules.

16. The delivery system of claim 1, and further comprising a height-actuator configured to control the height of the sprayer above the component at the designated spray-location.

17. A delivery system for delivering cooling fluid to cool a hot component on a board, the component having a designated spray-location, comprising:

a means for spraying cooling fluid; and

a means for relatively actuating the means for spraying among a plurality of lateral locations with respect to the board, one of the plurality of lateral locations being the designated spray-location;

wherein the means for spraying is configured to cool the component when located at the designated spray-location.

18. The delivery system of claim 17, wherein:

the means for actuating is structurally configured to relatively move the means for spraying in exactly one degree-of-freedom; and

the one-degree-of-freedom movement by the means for actuating independently determines the lateral locations, with respect to the board, to which the spray-module can be actuated.

19. The delivery system of claim 17, wherein the means for actuating is structurally configured to relatively move the spray-module in two degrees-of-freedom.

20. A method for delivering cooling fluid to cool a hot component on a board, the component having a designated spray-location, comprising the automated steps of:

(a) relatively actuating a spray-module, among a plurality of lateral locations with respect to the board, to a first lateral location of the plurality of lateral locations, wherein the first lateral location is the designated spray-location for the component; and

(b) spraying cooling fluid from the spray-module to cool the component when the spray-module is located at the designated spray-location of the component.

21. The method of claim 20, being further configured for delivering cooling fluid to cool a second hot component on the board, the second component having a second designated spray-location, and further comprising the automated steps of:

(c) relatively actuating a second spray-module, among a second plurality of lateral locations with respect to the board, to a second lateral location of the second plurality of lateral locations, wherein the second lateral location is the designated spray-location for the second component; and

(d) spraying cooling fluid from the second spray-module to cool the second component when the second spray-module is located at the designated spray-location for the second component; and

(e) repeating steps (a) through (d).

22. The method of claim 20, being further configured for delivering cooling fluid to cool a second hot component on the board, the second component having a second designated spray-location, and further comprising the automated steps of:

(c) relatively actuating the spray-module to a second lateral location of the plurality of lateral locations, wherein the second lateral location is the designated spray-location for the second component; and

(d) spraying cooling fluid from the spray-module to cool the second component when the spray-module is located at the designated spray-location for the second component; and

(e) repeating steps (a) through (d).

23. The method of claim 22, wherein the steps of actuating are conducted by an actuator structurally configured for one-degree-of-freedom actuation among all lateral locations to which the spray-module can be actuated.

24. The method of claim 23, wherein the actuator structure defines a single, nonlinear pathway forming a continuous loop along which the spray-module can be actuated.

25. The method of claim 22, wherein the steps of actuating are conducted by an actuator including structure configured for two-degree-of-freedom actuation among all lateral locations to which the spray-module can be actuated.

26. A sprayer delivery system for operating a spray-module at a plurality of laterally located designated spray-locations relative to a respective plurality of hot components, the spray-module including a sprayer configured for delivering cooling fluid to cool each component of the plurality of components when the spray-module is located in the respective designated spray-location for that component, comprising:

an actuator configured to relatively move the spray-module among the plurality of designated spray-locations; and

a controller configured to control the delivery of cooling fluid by the sprayer, to cool the plurality of components.

27. The sprayer delivery system of claim 26, wherein the controller is configured to control the height of the sprayer relative to each component of the plurality of components.

28. The sprayer delivery system of claim 26, and further comprising a spray-module station, wherein:

the actuator is configured to relatively move the spray-module to a station-location adjacent the spray-module station;

the controller is configured to control the actuator such the actuator repeatedly actuates the spray-module to the station-location;

the spray-module includes a reservoir configured to hold cooling fluid for delivery; and

the spray-module and spray-module station are configured for the spray-module station to provide cooling fluid to the reservoir when the spray-module is in the station-location.

29. The sprayer delivery system of claim 26, and further including a spray-module station including a magazine configured to store one or more replacement spray-modules, wherein:

the actuator is configured to removably connect to a spray-module of the one or more replacement spray-modules.

30. The sprayer delivery system of claim 26, wherein the controller is configured to control the delivery of cooling fluid by controlling the operation of the sprayer to cool each component.

31. The sprayer delivery system of claim 26, wherein the controller is configured to control the delivery of cooling fluid by controlling the operation of the actuator.

32. The sprayer delivery system of claim 26, and further comprising a configuration system configured to adapt at least one of the actuator and the controller, for use with different pluralities of designated spray-locations.

33. The sprayer delivery system of claim 32, wherein the configuration system includes a location-designator portion of the controller, the location-designator portion using component-location information about the board to establish actuator controls for positioning the spray-module at the designated spray-locations.

34. The sprayer delivery system of claim 32, wherein:

the plurality of components are part of one or more insertable structures; and

the configuration system is configured to access configuration information from the one or more insertable structures.

35. A board connection system for connecting to a board having a plurality of hot components that define a respective plurality of designated spray-locations for delivering cooling fluid to the hot components, and having a component configured to provide configuration information, comprising:

a spray-module including a sprayer configured for delivering cooling fluid;

an enclosure configured for the removable reception of the board; and

the sprayer delivery system of claim 34, configured for accessing the configuration information from the board when the board is received in the enclosure, for adapting the actuator for use with the plurality of designated spray-locations, and for operating the spray-module at the plurality of designated spray-locations.

36. A sprayer delivery system for operating a spray-module at a plurality of laterally located designated spray-locations relative to a respective plurality of hot components, the spray-module including a sprayer configured for delivering cooling fluid to cool each of the plurality of components when the spray-module is located in the respective designated spray-location for that component, comprising:

a means for relatively actuating the spray-module among the plurality of designated spray-locations; and

a means for controlling the delivery of cooling fluid by the sprayer, to cool the plurality of components.

37. The sprayer delivery system of claim 36, and further comprising a means for adapting the means for actuating such that the means for actuating is configured to relatively move the spray-module among the plurality of designated spray-locations.

38. The sprayer delivery system of claim 37, wherein the plurality of components are part of one or more insertable structures, and further comprising a means for reading configuration information from at least one of the insertable structures, the information identifying the plurality of designated spray-locations for use by the means for adapting.

39. The sprayer delivery system of claim 36, and further comprising a means for adapting the means for controlling such that the means for controlling is configured to operate the sprayer when the spray-module is located in the designated spray-locations.

40. A method for operating a spray-module at a plurality of laterally located designated spray-locations relative to a respective plurality of components, the spray-module including a sprayer configured for delivering cooling fluid to cool each of the plurality of components when the spray-module is located in the respective designated spray-location for that component, comprising:

relatively actuating the spray-module among the plurality of designated spray-locations; and

controlling the delivery of cooling fluid by the sprayer, to cool the plurality of components.

41. The method of claim 40, and prior to the steps of actuating and directing, further comprising:

adapting the actuation of the step of actuating such that the spray-module moves among the plurality of designated spray-locations.

42. The method of claim 41, wherein the plurality of components are part of one or more insertable structures, and wherein the step of adapting includes:

reading information from at least one of the insertable structures, the information identifying the plurality of designated spray-locations for use in the step of adapting.

43. A sprayer delivery system for operating a spray-module at a designated spray-location relative to a hot component on a board, the spray-module including a sprayer configured for delivering cooling fluid to cool the component when the spray-module is located in the designated spray-location, comprising:

a sensor configured to sense cooling-status information;

an actuator configured to relatively move the spray-module among a plurality of lateral locations with respect to the board, one of the plurality of lateral locations being the designated spray-location; and

a controller configured to control the delivery of cooling fluid by the sprayer to cool the component, based on the cooling-status information sensed by the sensor.

44. The sprayer delivery system of claim 43, being further configured for operating the spray-module at a second designated spray-location relative to a second hot component on the board, the second designated spray-location being one of the plurality of lateral locations, and further comprising:

a second sensor, configured to sense cooling-status information regarding the cooling status of the second component;

wherein the controller is configured to control the delivery of cooling fluid by the sprayer to cool the second component, based on the cooling-status information sensed by the second sensor.

45. The sprayer delivery system of claim 44, wherein the second sensor is configured to detect a temperature of the second component.

46. The sprayer delivery system of claim 44, wherein the second sensor is configured to detect a power usage level of the second component.

47. The sprayer delivery system of claim 43, wherein the sensor is configured to detect pressure.

48. A sprayer delivery system for operating a spray-module at a designated spray-location relative to a hot component on a board, the spray-module including a sprayer configured for delivering cooling fluid to cool the component when the spray-module is located in the designated spray-location, comprising:

a sensing means for sensing cooling-status information;

an actuating means for relatively actuating the spray-module among a plurality of lateral locations with respect to the board, one of the plurality of lateral locations being the designated spray-location; and

a controlling means for controlling the delivery of cooling fluid by the sprayer to cool the component, based on the cooling-status information sensed by the sensing means.

49. The sprayer delivery system of claim 48, being further configured for operating the spray-module at a second designated spray-location relative to a second hot component on the board, the second designated spray-location being one of the plurality of lateral locations, and further comprising:

a second sensing means for sensing cooling-status information regarding the cooling status of the second component;

wherein the controlling means is configured for controlling the delivery of cooling fluid by the sprayer to cool the second component, based on the cooling-status information sensed by the second sensing means.

50. A method for operating a spray-module at a designated spray-location relative to a hot component on a board, the spray-module including a sprayer configured for delivering cooling fluid to cool the component when the spray-module is located in the designated spray-location, comprising:

(a) sensing cooling-status information;

(b) relatively actuating the spray-module among a plurality of lateral locations with respect to the board to reach the designated spray-location, wherein one of the plurality of lateral locations is the designated spray-location;

(c) controlling the delivery of cooling fluid by the sprayer to cool the component, based on the cooling-status information sensed in step (a); and

(d) repeating steps (a), (b) and (c).

51. The method of claim 50, wherein step (a) occurs prior to step (b) in each repetition that includes steps (a) and (b).

52. The method of claim 50, further providing for operating the spray-module at a second designated spray-location relative to a second hot component on the board, the second designated spray-location being one of the plurality of lateral locations, and further comprising:

(e) sensing cooling-status information regarding the cooling status of the second component;

(f) relatively actuating the spray-module among the plurality of lateral locations with respect to the board to reach the second designated spray-location;

(g) controlling the delivery of cooling fluid by the sprayer to cool the second component, based on the cooling-status information sensed in step (e);

(h) repeating steps (e), (f) and (g).

53. The method of claim 52, wherein step (e) occurs prior to step (f) in each repetition that includes steps (e) and (f).